

# RECEIVED

## Utah Class III Landfill Permit Application Form

SEP - 6 2005  
05-02990

UTAH DIVISION OF

SOLID & HAZARDOUS WASTE

### Part I General Information

APPLICANT: PLEASE COMPLETE ALL SECTIONS.

#### I. Landfill Type

☐ Class IIIa  
☒ Class IIIb

#### II. Application Type

☐ New Application  
☒ Renewal Application

☐ Facility Expansion  
☐ Modification

For Renewal Applications, Facility Expansion Applications and Modifications Enter Current Permit Number 0004

#### III. Facility Name and Location

Legal Name of Facility  
ATK Thiokol Inc.

Site Address (street or directions to site)  
24 miles west, northwest of Brigham City on Hwy 83

County  
Box Elder

City Promontory State Utah Zip Code 84307 Telephone 435-863-4479

Township 11 N Range 5 W Section(s) 8 Quarter/Quarter Section Quarter Section

Main Gate Latitude degrees minutes seconds Longitude degrees minutes seconds

#### IV. Facility Owner(s) Information

Legal Name of Facility Owner  
ATK Thiokol Inc.

Address (mailing)  
P.O. Box 689 M/S 301

City Brigham City State UT Zip Code 84302-0689 Telephone 435-863-4479

#### V. Facility Operator(s) Information

Legal Name of Facility Operator  
Same as above

Address (mailing)

City State Zip Code Telephone

#### VI. Property Owner(s) Information

Legal Name of Property Owner  
Same as above

Address (mailing)

City State Zip Code Telephone

#### VII. Contact Information

Owner Contact K. Gene Curtis Title Environmental Engineer

Address (mailing)  
P. O. Box 689 M/S 301

City Brigham City State UT Zip Code 84302-0689 Telephone 435-863-4479

Email Address gene.curtis@atk.com Alternative Telephone (cell or other) 435-279-0216

Operator Contact Same as above Title

Address (mailing)

City State Zip Code Telephone

Email Address Alternative Telephone (cell or other)

Property Owner Contact Same as above Title

Address (mailing)

City State Zip Code Telephone

Email Address Alternative Telephone (cell or other)

# Utah Class III Landfill Permit Application Form

## Part I General Information (Continued)

VIII. Waste Types (check all that apply)			IX. Facility Area	
Waste Type	Combined Disposal Unit	Monofill Unit		
X Construction & Demolition	X	<input type="checkbox"/>	Facility Area.....	<u>72.7</u> acres
X Industrial	X	<input type="checkbox"/>	Disposal Area.....	<u>18.7</u> acres
X Incinerator Ash	X	<input type="checkbox"/>	Design Capacity	
<input type="checkbox"/> Animals	<input type="checkbox"/>	<input type="checkbox"/>	Years.....	<u>30</u>
X Asbestos	X	<input type="checkbox"/>	Cubic Yards.....	<u>603,393</u>
<input type="checkbox"/> PCB's (R315-315-7(3) only)	<input type="checkbox"/>	<input type="checkbox"/>	Tons.....	<u>301,696</u>
<input type="checkbox"/> Other _____	<input type="checkbox"/>	<input type="checkbox"/>		

Note: All waste types must be generated by the industry which owns the facility

## X. Fee and Application Documents

Indicate Documents Attached To This Application ☐ Application Fee: Amount \$ Bill After 7/10/01

<input checked="" type="checkbox"/> Facility Map or Maps	<input checked="" type="checkbox"/> Facility Legal Description	<input checked="" type="checkbox"/> Plan of Operation	<input checked="" type="checkbox"/> Waste Description
<input type="checkbox"/> Ground Water Report	<input type="checkbox"/> Closure Design	<input type="checkbox"/> Cost Estimates	<input type="checkbox"/> Financial Assurance

I HEREBY CERTIFY THAT THIS INFORMATION AND ALL ATTACHED PAGES ARE CORRECT AND COMPLETE.

Signature of Authorized Owner Representative <u>George E. Goach</u> Name typed or printed <u>George E. Goach</u>	Title <u>Manager</u>	Date <u>09 March 2005</u>
Signature of Authorized Land Owner Representative (if applicable)  Name typed or printed  	Address <u>P.O. Box 689 Brigham City, UT 84302</u>	Title  Date  
Signature of Authorized Operator Representative (if applicable)  Name typed or printed  	Address  	Title  Date  

ATK THIOKOL INC. - PROMONTORY  
CLASS IIIB PERMIT APPLICATION

PART II – GENERAL REPORT

INTRODUCTION

**General information** – see page 1 of permit application (R315-310-3(1)(a))

**General Description** – ATK Thiokol is located 24 miles west, northwest of Brigham City, Utah, in a sparsely populated portion of Box Elder County. The facility occupies 19,900 acres of semi arid high desert. Blue Creek, a low quality high TDS stream, runs along the western boundary of the facility. The landfill is positioned near the center of the facility, just east of blue creek. Another portion of the landfill lies east of the in-plant road and east of the M136 burn grounds. A third site located approximately ½ mile south of M-136 and east of the in plant road is also included in this application. This site is referred to as the “Rock Point” landfill.

Average annual rainfall ranges between 11 to 14 inches. The soil in the landfill area lies on Lake Terraces with slightly convex slopes, medium in length. Frost-free period ranges between 100 and 130 days. Runoff is medium with a moderate erosion hazard. Ground water is at a depth of approximately 120’, covered by a combination of Thiokol Silt Loam and Hansel Silt Loam. Permeability ranges between 0.6 and 2.0 inches per hour, and the soil is rated as good for use as cover at a sanitary landfill. (R-315-310-3(1)(b))

**Legal Description** - The area surrounding the facility is zoned U1 (agriculture/grazing). The legal description along with longitude and latitude is included on the general arrangement, print number M336.G.1, M136-B and GP1.G.556 . (R315-310-3(1)(c))

**Types of Waste** - The types of waste received at ATK Thiokol’s landfill includes office, cafeteria, asbestos, propellant burn ash, and other non-hazardous industrial waste. ATK Thiokol’s Northern Utah Operations, as well as Autoliv’s Promontory Facility generate these wastes. The M-136 landfill receives exclusively, propellant burn ash and related debris. Rocky Point landfill receives large hardware such as rocket motor nozzles, cases and other misc. large parts. M-336 landfill receives all other wastes, including office, cafeteria, manufacturing, etc.(R315-310-3(1)(d))

**Commercial Landfill** – ATK Thiokol’s landfill only accepts solid waste from ATK Thiokol facilities or from Autoliv’s Promontory plant, which lies within the ATK Thiokol plant. Autoliv waste has been accepted at ATK Thiokol’s landfill since the split of Morton and Thiokol, as part of a continuing service agreement. In consideration of this effort, ATK Thiokol receives a small fee to help offset the cost of handling their waste. ATK Thiokol believes their landfill operation does not meet the definition of a commercial landfill and should be regulated as a Class IIIB, non-commercial landfill.

## PLAN OF OPERATION

### **Schedule of Construction – NA**

#### **Onsite waste handling procedures and form to track waste going into landfill**

#### **DESCRIPTION OF HANDLING PROCEDURES FOR TRASH OPERATIONS AT M336, M136 AND ROCKY POINT ATK THIOKOL LANDFILLS**

1. The landfills at M336, M136 and Rocky Point will be managed by trained operators, and in a safe manner consistent with State requirements. Trash quantities for the year will be estimated, based on actual yardage capacity of the trash truck. Tonnage for the annual report will be estimated using a conversion factor.
2. The landfills will be operated as a trench and fill landfill, digging a new trench for waste disposal as required. Cells, as they are closed will be covered with at least 24" of soil cover. Seeding will be provided as needed to enhance growth, upon closure of the facility.
3. Trash will be dumped into the cell and then transported to the face of the current cell using powered equipment assigned to the landfills. Compaction will be maximized by frequently traversing the face of the cell with metal tracked equipment.
4. Trash, which includes office and cafeteria waste, will be placed in the M336 landfill and will be covered daily with soil or a tarp to minimize blowing, vectors, fires, odors and scavenging. The tarp will be a DuraShield 10,000 FR by Thorp Tarp, or equivalent. This tarp is composed of a 16 mil woven reinforced fire retardant 4-ply polyethylene with D rings to secure. If the tarp is used, the exposed working face will be covered every 8 operating days with 6" of soil. Alternatives to the covering methods described above must be approved by the Division prior to use.

Due to the nature of the waste placed in the M136 landfill, (burn ash and associated debris) and the high berms around the trench to prevent movement of the Burn Grounds waste, daily cover to prevent movement of this material will not be required. Both M136 and Rocky Point landfills will be covered as needed to prevent dust and fire hazards, and to prevent attraction of animals.

5. Employees receive training which details waste streams appropriate for our landfill. A minimum of 10% of all dumpsters will be audited on an annual basis, to verify compliance with the waste disposal regulations.
6. Surfaces of the landfills shall be contoured to reduce storm water run-on and runoff.
7. Free liquids are prohibited from disposal at ATK Thiokol's landfills.
8. Unauthorized personnel (public, untrained contractors, etc.) are not allowed on ATK Thiokol property and do not have access to the landfills. The entrances to the landfills are locked from Thursday afternoon until Monday morning. Access to the landfill when locked, is through Plant Security after obtaining clearance from landfill operators.

9. Inspections will be conducted once a month by the assigned landfill operator. Inspection results will be reported on form number FQA-0235 checklist (see attached). Records will be maintained in the Environmental Service's central files for three years.

**Inspection schedule and form** – See attachment

**Contingency Plan** - Our Contingency plan is included as part of our Emergency and Disaster Response Plan. This plan can be found at the Fire Department, Security Office, and other selected locations throughout the plant. Our Contingency Plan is also included as an appendix to our Part B Permit on file with DEQ.

**Corrective action Program for ground water contamination** – NA

**Contingency Plan for other releases** – Covered above

**Fugitive dust control** – Primary interior landfill roads will be sprayed with magnesium chloride as needed to control dust. Soil stock piled for use as cover is predominately moist and will not contribute substantially to fugitive dust. A water truck will be used for operations that generates significant quantities of dust.

**Installed equipment maintenance** – NA

**Procedures for excluding prohibited waste** – Written policies are in place that prohibit onsite land disposal of any type of hazardous or PCB containing waste. A hazardous waste dock coordinator manages all waste generating areas on plant. These coordinators are extensively trained in solid and hazardous waste regulations, and have a good knowledge of what can, and cannot go into our onsite landfill. In addition to these precautions, the landfill operators also make periodic random inspections of the dumpsters to assure no unauthorized waste is coming to the landfill. An inspection form titled “Landfill Audits” is attached. This form is used to track the results of dumpster inspections looking for inappropriate waste disposal practices.

**Controlling disease vectors** – A small amount of biological waste is disposed in the landfill, which comes from the Medical Services area. This waste is placed in puncture proof containers, and is immediately buried upon placement in the landfill. These practices minimize the potential hazard associated with these disease vectors. Living vectors are minimized by covering trash and keeping buildings clean and orderly.

**Alternative waste handling** – On occasion when equipment breakdown prevents ATK Thiokol from picking up and disposing of our trash, we will utilize an existing contract to bring in an outside contractor to handle trash pickup. This contractor can haul our trash to the ATK Thiokol landfill, or to the Box Elder County Landfill, if the need arises.

**Training and Safety** – All landfill workers receive training on how to safely operate the disposal facility prior to performing unsupervised work at the landfill. This training

includes site-specific information found in SOPs (Standard Operating Procedures), as well as utilization of general training from the Solid Waste Association of North America. Safety Policies and Procedures can be found in “the “General Safety and Health Manual”, on the ATK Thiokol Web. Operators also receive training on landfill permit requirements. SOP and landfill permit training are both documented in a computer tracking system referred to as TEDS.

**Security** – ATK Thiokol’s landfills lie within a fenced facility with roving 24 hour armed guards. Only authorized personnel are allowed within the facility. In addition to this security, the landfills are fenced with locked gates on weekends.

**Cell design** - The landfill cell design will comply with all R315 requirements. Drawing numbers M136/M336-C shows a typical cross section of the cell, including clay liner and cover.

**Run-on and run-off control** - Each open cell is surrounded by large berms to prevent surface waters from running into or out of the cells. The lower landfill is designed with a low area to collect run-off and hold for evaporation. The upper landfill, east of M136 is constructed on a hill. Water inside the bermed area stays within the cell, while all water outside the berm follows the natural storm channel. The Rocky Point landfill will be graded as needed to minimize run-on and run-off.

**Signage** - Each landfill site is identified with a sign at the entrance.

**Fire protection** - ATK Thiokol maintains two full time fire stations at the North and South plants. Emergency assistance, including fire control, can be summoned using a cell phone by dialing (435) 863-2222.

## CLOSURE PLAN

**Closure Schedule** – When a cell is filled, it is capped with 24 inches of compacted native soil with a permeability of approximately  $1.76 \times 10^{-7}$  cm/sec as tested by Dames & Moore. This soil includes six inches of topsoil, which is placed over the compacted soil to complete the cover. The topsoil will be seeded using a mix of grasses similar to the native vegetation as needed. It is estimated that at current generation levels and management practices, ATK Thiokol’s landfill will receive waste until the year 2,035.

**Cover Design** – See drawing M136/M336-C

**Site Capacity** – Based on an estimated life of 30 years, our total capacity is:

Remaining permitted landfill area is 18.7 acres x average landfill depth of 20' = 603,393 cubic yards. 603,393 cubic yards/10,000 cubic yards/year = 60years. 50% of this space is taken up by soil cover and space between cells which equates to a total life expectancy of 30 years. Changes in waste generation volume and recycling efforts could significantly increase the landfill life expectancy.

**Final Inspection** –Within 30 days after completion of closure activities, the State will be contacted to request the final inspection. Any required modifications will be completed within 30 days, and a re-inspection requested. Once closure is completed to the satisfaction of the Division of Solid and Hazardous Waste, Post-closure Care will begin.

#### POST CLOSURE CARE PLAN

##### **Site Monitoring – NA**

**Changes to record of title, etc.** – Changes in land ownership which would effect the property title, will be reported to the State in a timely manner. Other changes, like land use or zoning restrictions will also be reported.

**Maintenance** – Since ground water monitoring and leachate collection is not required, the only maintenance needs will be cover and drainage preservation. Inspections will be performed monthly and repairs made as needed. The workface size is minimized, which reduces exposure and the quantity of soil needed to cover the exposed face.

**Approach and Exit Roads** - The ATK Thiokol landfills are located entirely within a secured facility. Therefore, we do not experience traffic separation and control problems common to a public landfill.

##### **Contact for Post Closure Care –**

ATK Thiokol Inc.  
Environmental Services  
P.O. Box 707 M/S 301  
Brigham City, UT 84302-0707  
(435) 863-3344

#### FINANCIAL ASSURANCE

**Closure Cost Estimate** – See attached for calculated costs. Our Financial Assurance documents are on file with the DEQ Hazardous Waste Section as part of our Part B permit as required by EPA.

**Post Closure Care Cost** – See Attachment

## **Thiokol landfill Closure Cost Estimate**

### **M336, M136, Rock Point**

(Based on third party closure)

1.	Place 2' soil cap over final waste trench: (3150 cu yds)	
	Excavate, transport, place, and compact soil	
	Supervision 40 hrs @ 75	\$3,000
	Excavator 40 hrs @ 150	\$6,000
	Belly Dumps 70 hrs @ 75	\$5,250
	Bulldozer 40 hrs @ 125	\$5,000
2.	Seed area as needed:	
	Crested Wheat Grass seed	\$600
	Labor and Equipment 15hrs @ 100	<u>\$1,500</u>
	<b>Subtotal</b>	<b>\$21,350</b>

### **POST CLOSURE CARE ESTIMATE**

**30 Years**

1.	Quarterly site inspection	
	15 hrs/yr x 30 yrs = 450 hrs @ \$75	\$33,750
2.	Minor erosion repair	
	Bulldozer 7 hrs/yr x 30 yrs = 210 hrs @ 125	<u>\$26,250</u>
	<b>Subtotal</b>	<b>\$60,000</b>
	<b>Subtotal</b>	<b>\$81,350</b>
	10% contingency	<u>\$8,135</u>
	<b>Grand Total</b>	<b>\$89,485</b>

An updated financial assurance has been submitted to the State as required by our Part B Hazardous Waste Storage Permit. This document includes financial assurance for the landfill closure and post closure care.



# ENVIRONMENTAL WASTE DISPOSAL OPERATIONS

M336/M136/ROCKY POINT AREA INSPECTION (MONTHLY)

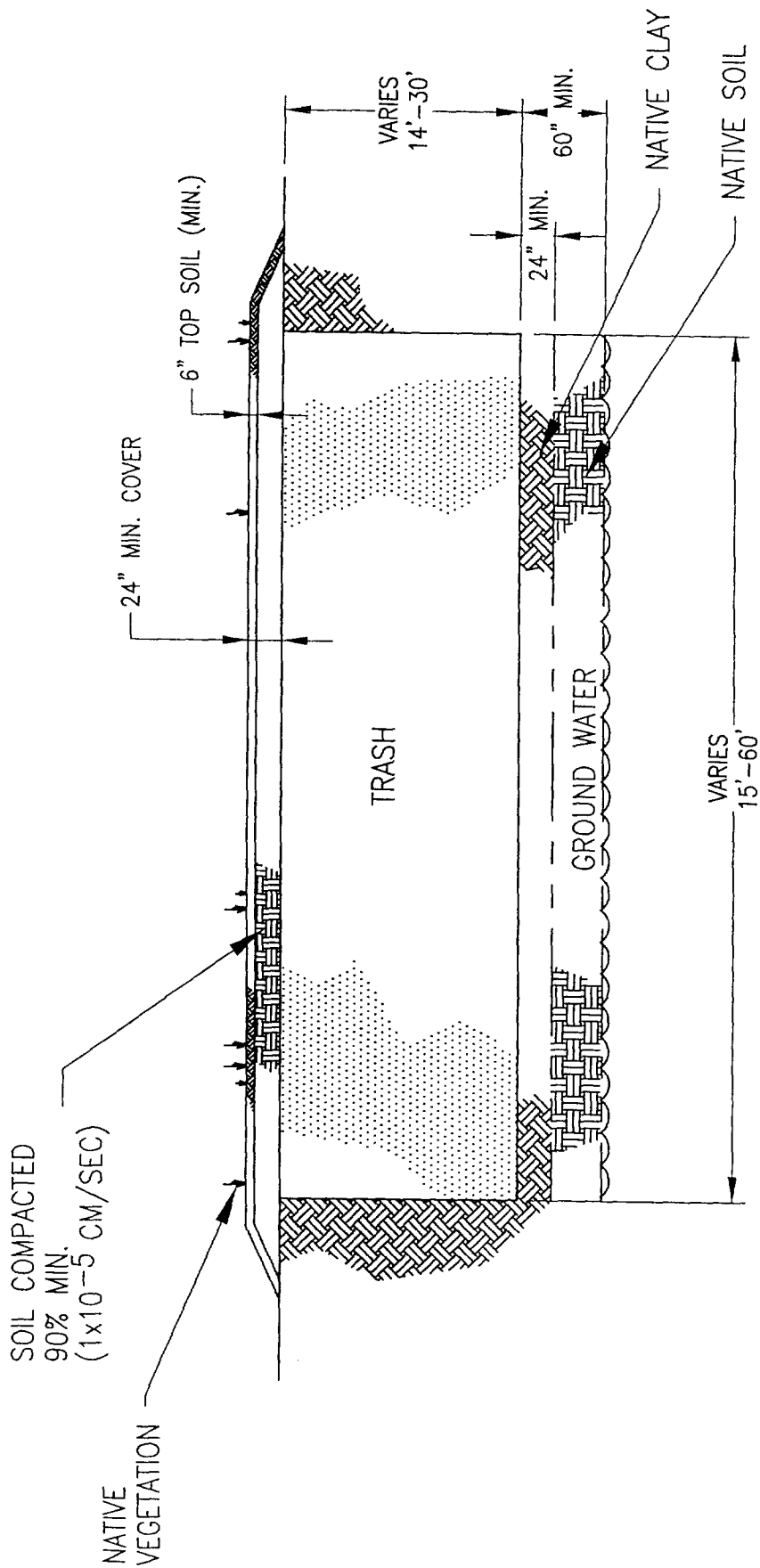
DATE: \_\_\_\_\_ TIME: \_\_\_\_\_ OPERATOR: \_\_\_\_\_

PRINT

SIGN

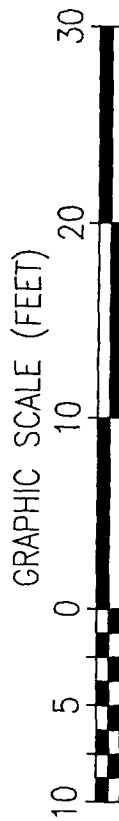
ITEM	ACCEPTABLE	
	YES	NO
<b>BUILDING AREA</b>		
A. Gates and Locks	<input type="checkbox"/>	<input type="checkbox"/>
B. Signs: Good Condition	<input type="checkbox"/>	<input type="checkbox"/>
C. Portable Eye Wash (in shed): Expiration Date Current	<input type="checkbox"/>	<input type="checkbox"/>
<b>HOUSEKEEPING</b>		
A. Cabinets: Cleaned and Organized	<input type="checkbox"/>	<input type="checkbox"/>
B. Emergency Exits	<input type="checkbox"/>	<input type="checkbox"/>
1. Identified Properly	<input type="checkbox"/>	<input type="checkbox"/>
2. Self Closing Doors: Operate Properly	<input type="checkbox"/>	<input type="checkbox"/>
C. Fire Extinguishers	<input type="checkbox"/>	<input type="checkbox"/>
1. In Proper Location and Marked	<input type="checkbox"/>	<input type="checkbox"/>
2. Inspection: Current	<input type="checkbox"/>	<input type="checkbox"/>
3. Pressure Gauge: In Green Range	<input type="checkbox"/>	<input type="checkbox"/>
<b>FLAMMABLE STORAGE CABINETS</b>		
A. Grounded	<input type="checkbox"/>	<input type="checkbox"/>
B. Contents: Compatible	<input type="checkbox"/>	<input type="checkbox"/>
C. Quantities: Acceptable	<input type="checkbox"/>	<input type="checkbox"/>
D. Hazardous Communications Labels: As required	<input type="checkbox"/>	<input type="checkbox"/>
<b>STORM WATER/EROSION</b>		
A. No water running on or out of landfill	<input type="checkbox"/>	<input type="checkbox"/>
B. Significant erosion problems	<input type="checkbox"/>	<input type="checkbox"/>

COMMENTS/CORRECTIVE ACTION:



**NOTES:**

1. CELL IS TO HAVE A 2' MINIMUM OF CLAY EARTH AT BOTTOM OF TRENCH.
2. BOTTOM OF CELL SHALL BE 5' MIN. ABOVE GROUND WATER.
3. CELL IS TO HAVE NO MORE THAN 2% MAX. SLOPE IN LENGTH OF TRENCH.
4. COMPACTED TRASH WILL BE COVERED WITH 2' MIN. SOIL, INCLUDING 6" OF TOP SOIL.
5. CLOSED CELL SHALL BE RESEEDDED WITH NATIVE VEGETATION.

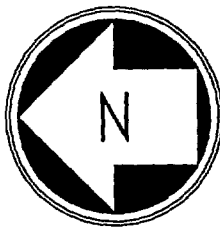
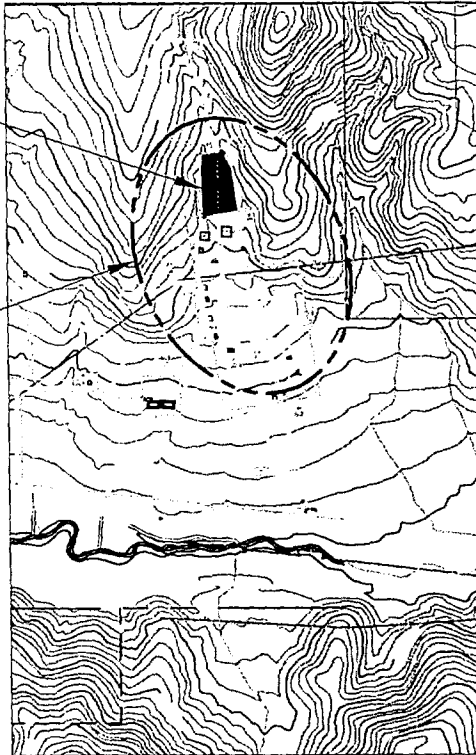


Q:\FACILITY\RELEASE\GEN\M136G41.DWG

SCALE: 1"=10'±	<b>THIOKOL INC.</b> FACILITIES ENGINEERING P.O. Box 707 ms 552 Brigham City, Utah 84302	
DATE: 3FEB2005		
M136-C	TYP SECTION OF LANDFILL TRENCHES, M-136/M-336	

INDUSTRIAL  
LANDFILL

SEE ENLARGED VIEW  
ON DWG M136-B



GRAPHIC SCALE

FEET



SCALE: 7 1/2 MINUTE

Q:\FACILITY\RELEASE\GEN\M136G41.DWG



**THIOKOL INC.**  
FACILITIES ENGINEERING  
P.O. Box 707 ms 552  
Brigham City, Utah 84302

DATE:  
3FEB2005

M136-A

INDUSTRIAL  
LANDFILL



THIOKOL INC.  
FACILITIES ENGINEERING  
P.O. Box 707 ms 552  
Brigham City, Utah 84302

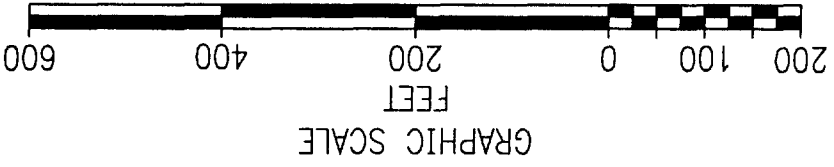
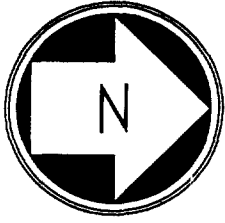
M136-B

DATE: 3FEB2005

INDUSTRIAL LANDFILL  
ENLARGED VIEW

Q:\FACILITY\RELEASE\GEN\M136G41.DWG

INDUSTRIAL LANDFILL DESCRIPTION:  
BEGINNING AT POINT #1:  
1) N 86° 57' 14" 437.70'  
2) S 77° 13' 58" 177.82'  
3) S 6° 41' 50" 190.71'  
4) S 64° 43' 23" 177.16'  
5) S 82° 3' 4" 416.29'  
6) N 10° 2' 39" 345.54'



SOUTH EAST CORNER OF  
INDUSTRIAL LANDFILL  
LAT. 112° 25' 35.26"  
LONG. 41° 41' 10.04"

MONITOR WELL  
(TYPICAL)

FENCE: FROM EDGE OF  
DRAINAGE TO 5' FROM  
CLOSEST MONITOR WELL

POINT #1:  
NORTH WEST CORNER OF  
INDUSTRIAL LANDFILL  
LAT. 112° 25' 43.61"  
LONG. 41° 41' 12.08"

DRAINAGE (TYP)





# LANDFILL LOG



New Record

Edit



## Record Navigation



Update Building List

Add Building

Date Rec.: [Date]

Building	Description	Qty	UM	Disposal Site
E517	PHENOLIC CARBON	3	CY	ASBESTOS INDUSTRIAL TRENCH
H007	ASBESTOS AND DEBRIS	3	CY	ASBESTOS INDUSTRIAL TRENCH
M003	ASBESTOS AND DEBRIS	4	CY	ASBESTOS INDUSTRIAL TRENCH
M086	PHENOLIC CARBON	8	CY	POINT OF MOUNTAIN
M136	CRUSHED METAL DRUMS	5	CY	ASBESTOS INDUSTRIAL TRENCH
M508	SAND	3	CY	ASBESTOS INDUSTRIAL TRENCH
M585	ASBESTOS AND DEBRIS	3	CY	ASBESTOS INDUSTRIAL TRENCH
PLANT	COMMON TRASH	40	CY	LANDFILL

Comments:

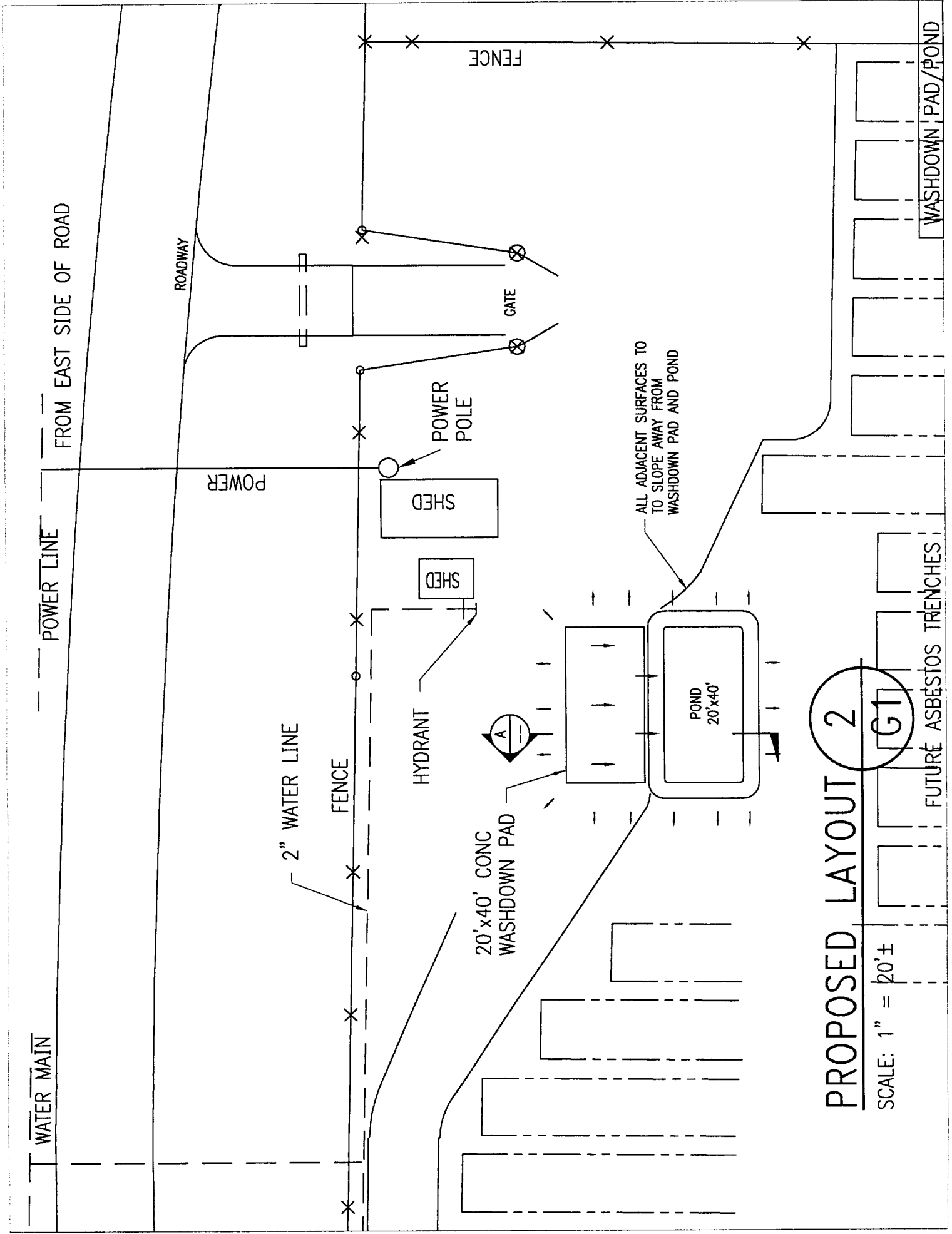
Control SpaceBar: Building Name & UM Help

start



Environmental Opera...

6:40 AM



# PROPOSED LAYOUT 2

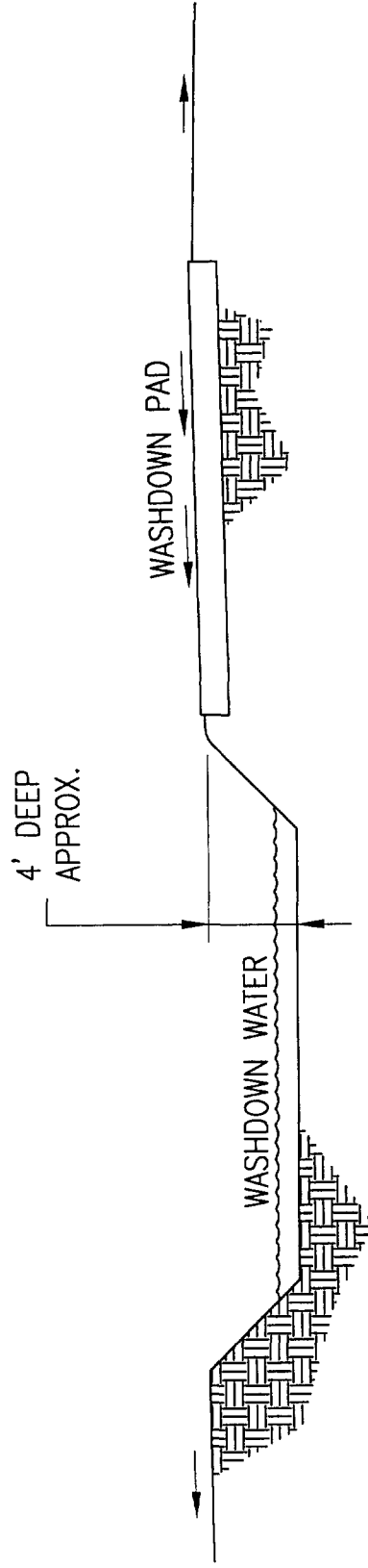
SCALE: 1" = 20'±

GT

FUTURE ASBESTOS TRENCHES

WASHDOWN PAD/POND





TYPICAL SECTION A  
---

SCALE: 1/8" = 1'-0" APPROX.

WASHDOWN PAD/POND